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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/691,821	10/23/2003	William F. Graebe JR.	10286-008-43048	6330

23489 7590 05/19/2005  
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EXAMINER

SINGH, SUNIL

ART UNIT PAPER NUMBER

3673

DATE MAILED: 05/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center"><b>Office Action Summary</b></p>	<b>Application No.</b> 10/691,821	<b>Applicant(s)</b> GRAEBE, WILLIAM F.	
	<b>Examiner</b> Sunil Singh	<b>Art Unit</b> 3673	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-30 and 32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 1-3, 6-16, 18, 19, 22 and 23 is/are allowed.
- 6) ☐ Claim(s) 4, 5, 17, 20, 21, 24-30 and 32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. ____.  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>2/22/05</u> .   | 6) <input type="checkbox"/> Other: ____.                                    |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 4,5,17,20,21 and 27 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. They constitute new matter since limitations called for in the above mentioned claims were never previously disclosed.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 24-30 and 32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 24 is confusing because the system has to either include the "air cushion" or if the "system" is related to the "air cushion" then the system cannot comprise the "air cushion". Claim 28 has a similar problem.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Graebe, Jr. '313. in view of Jay (US 4726624)

Graebe, Jr. discloses an air cushion control system comprising an air chamber sensor (34) including an air chamber (see Fig. 1), a bottom out sensor (80,88), and an overinflation sensor (82,90), an air pump (40) to inflate the air chamber, an air valve (52,62) to release air from the air chamber, means (46,50,54,58) to connect the air cushion control system to an air cushion (see col. 3 line 35+) and a microprocessor (74) to control the inflation and the release of the air from the air chamber. A housing (30,12). An alarm is sounded when in the bottom-out condition (col. 4 line 15). Graebe, Jr. discloses the invention substantially as claimed. However, Graebe is silent about the distance from an edge of the air chamber sensor to an end of the channel wall does not exceed one half of the distance between the channel walls. Jay teaches the distance from an edge of the air chamber sensor to an end of the channel wall does not exceed one half of the distance between the channel walls (see Fig. 3, (34), see col. 7). It would have been considered obvious to one of ordinary skill in the art to modify Graebe, Jr. by making the distance from an edge of the air chamber sensor to an end of

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the channel wall does not exceed one half of the distance between the channel walls as taught by Jay in order to control the volume of filling material.

6. Claims 28-30, 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Graebe, Jr. '313. in view of Johnson (US 5450638)

Graebe, Jr. discloses an air cushion control system comprising an air chamber sensor (34) including an air chamber (see Fig. 1), a bottom out sensor (80,88), and an overinflation sensor (82,90), an air pump (40) to inflate the air chamber, an air valve (52,62) to release air from the air chamber, means (46,50,54,58) to connect the air cushion control system to an air cushion (see col. 3 line 35+) and a microprocessor (74) to control the inflation and the release of the air from the air chamber. A housing (30,12). An alarm is sounded when in the bottom-out condition (col. 4 line 15). Graebe, Jr. discloses the invention substantially as claimed. However, Graebe is silent about including support strips in his air channels. Johnson teaches support strips in air channels (see Fig. 3). It would have been considered obvious to one of ordinary skill in the art to modify Graebe Jr. to include support strips as taught by Johnson in order to increase the durability of the structure.

***Allowable Subject Matter***

7. Claims 1-3, 6-16, 18-19, 22, 23 are allowed.

***Response to Arguments***

8. Applicant's arguments with respect to claims 24 and 28 have been considered but are moot in view of the new ground(s) of rejection.

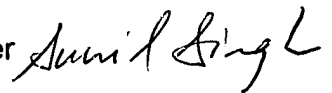
**Conclusion**

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sunil Singh whose telephone number is (571) 272-7051. The examiner can normally be reached on Monday through Friday 10:30 AM - 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Shackelford can be reached on (571) 272-7049. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sunil Singh  
Primary Examiner  
Art Unit 3673



SS  
5/13/05